



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,046		09/25/2000	John Brian Pickering	GB9-1999-0109US1	4077
25299	7590	04/29/2004		EXAMINER	
IBM CORI	PORATIO	ON	LERNER, MARTIN		
PO BOX 12 DEPT 9CCA		002	ART UNIT	PAPER NUMBER	
		GLE PARK, NC 27	2654		
				DATE MAILED: 04/29/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/670,046	PICKERING, JOHN BRIAN			
	Office Action Summary	Examiner	Art Unit			
		Martin Lerner	2654			
Period fo	The MAILING DATE of this communication or Reply	appears on the cover sheet w	ith the correspondence address			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication of period for reply specified above is less than thirty (30) days, at period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by superply received by the Office later than three months after the need patent term adjustment. See 37 CFR 1.704(b).	DN. R 1.136(a). In no event, however, may a n. a reply within the statutory minimum of thin priod will apply and will expire SIX (6) MOR tatute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on _	,				
		This action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□ 6)⊠ 7)⊠	Claim(s) <u>1 to 39</u> is/are pending in the appli 4a) Of the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) <u>1,2,7,10,11,14,15,20,23,24,27,28</u> Claim(s) <u>3-6,8,9,12,13,16-19,21,22,25,26,3</u> Claim(s) are subject to restriction ar	drawn from consideration. ,33,36 and 37 is/are rejected. 29-32,34,35,38 and 39 is/are				
Applicati	on Papers					
10)⊠	The specification is objected to by the Example The drawing(s) filed on 25 September 2000 Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	is/are: a) ☐ accepted or b) ☐ the drawing(s) be held in abeyangerection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).			
Prioritv ι	ınder 35 U.S.C. § 119					
12)⊠ a)l	Acknowledgment is made of a claim for fore All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Busee the attached detailed Office action for a	nents have been received. nents have been received in A priority documents have been reau (PCT Rule 17.2(a)).	opplication No received in this National Stage			
Attachmen —	t(s)					
2) 🔲 Notic 3) 🔲 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SE r No(s)/Mail Date	Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 			

Art Unit: 2654

DETAILED ACTION

Drawings

1. The drawings are objected to because of the following informalities:

Figure 5 is difficult to see because of the shading.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

Applicant is asked to send a replacement sheet for Page 15 of the Specification.

The page is mutilated and the bottom right hand corner torn, making it difficult to read the last three lines.

On page 17, line 13, "52" should be -5.2-..

On page 18, there is no reference to Steps 5.10 and 5.11 as illustrated in Figure 5.

On page 19, line 26; page 20, line 3; and page 20, line 6, shouldn't "i.e..," be – i.e.,--?

Appropriate correction is required.

Art Unit: 2654

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1, 2, 7, 10, 11, 14, 15, 20, 23, 24, 27, 28, 33, 36, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by *Kanevsky et al.*

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding independent claims 1, 14, and 27, *Kanevsky et al.* discloses a method, system, and computer program for dialogue management in an interactive voice response (IVR) system, comprising:

"the IVR receiving a voice signal from a caller" – audio capture module 106 can include a telephone interactive voice response system (column 5, lines 12 to 17: Figure 1); an audio capture module 106 is coupled to the dialog management unit 102 and

Art Unit: 2654

which captures a speech waveform associated with utterances spoken by the user 104 during the conversation (column 3, lines 34 to 47: Figure 1);

"an automatic speech recognition system (ASR) converting the voice signal to text" – speech recognizer 126 can transcribe the queries from the user (column 6, line 63 to column 7, line 8: Figure 1);

"a lexical analyzer estimating a caller type based on the number of words of a particular type within the text" – speaker clusterer and classifier 120; educational level of the user can be determined by the word choice for data mining purposes (column 4, lines 61 to 65: Figure 1); the user's dialect can be determined from the usage of keywords or idioms (column 4, lines 31 to 51: Figure 1); sociological classification can be estimated based on vocabulary and word series used by the user 104 (column 7, lines 21 to 29: Figure 1); implicitly, there is a "number" of such keywords, idioms, vocabulary words, or word series;

"a prompt generator using the caller type to make a dialogue decision" – processing module 210 is configured to modify behavior of the voice system 200 based on at least one user attribute which has been determined; system 200 includes a business logic unit 242 which is coupled to the dialogue management unit 202 and the dynamic classification module 240; dynamic classification module 240 can be configured to provide real-time feedback to the business logic unit 242 and the dialog management unit 202 (column 8, lines 10 to 31: Figure 2); the modification of the behavior of the voice system can include real-time modifying of the voice response system (column 10, lines 56 to 67: Figure 4); based on a language pattern, a product or

Art Unit: 2654

service can be tailored based on a user attribute (column 11, line 59 to column 12, line 17: Figure 6); dialog management in an interactive voice response system involves generation of prompts.

Regarding claims 2, 15, and 28, *Kanevsky et al.* discloses that the educational level of the user can be determined by the word choice for data mining purposes (column 4, lines 61 to 65: Figure 1); an educational level of the user reflects the competence level of the user.

Regarding claims 7, 20, and 33, *Kanevsky et al.* discloses the modification of the behavior of the voice system can include real-time modifying of the voice response system (column 10, lines 56 to 67: Figure 4); dynamic classification module 240 can be configured to provide real-time feedback to the business logic unit 242 and the dialog management unit 202 (column 8, lines 10 to 31: Figure 2); thus, a dialogue presented to the user is modified in real-time by dialogue management unit 202 based upon the classification of the user attributes by dynamic classification module 240 to meet objectives of business logic unit 242.

Regarding claims 10, 23, and 36, *Kanevsky et al.* discloses sociological classification can be estimated based on vocabulary and word series used by the user 104 (column 7, lines 21 to 29: Figure 1); based on a language pattern, a product or service can be tailored based on a user attribute (column 11, line 59 to column 12, line 17: Figure 6); words are spoken by a user in a "context" associated with any dialog to tailor a product or service based on a user attribute.

Art Unit: 2654

Regarding claims 11, 24, and 37, *Kanevsky et al.* discloses sociological classification can be estimated based on vocabulary and word series used by the user 104 (column 7, lines 21 to 29: Figure 1); vocabulary and word series are necessarily collected during a dialog; any dialog involves "a context of a task specific part of the dialogue" because every dialog is associated with a context and task in an interactive voice response system.

Allowable Subject Matter

5. Claims 3 to 6, 8 to 9, 12 to 13, 16 to 19, 21 to 22, 25 to 26, 29 to 32, 34 to 35, and 38 to 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

McAllister et al., Farrell, Cohen et al., and Stentiford disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-9064. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML 4/27/04

Examiner

Group Art Unit 2654